## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010481 Address: 333 Burma Road **Date Inspected:** 29-Dec-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Chen Xi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed

OBG # BAY 6

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 004755 to perform Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic Particle Test report for this date. The member is identified as Bottom plate. The weld tested is identified as follows:

(BP3002-001-091,092,093,094,095,096)

(BP3002-001-103,104,105,106,107,108)

(BP3002-001-117,118,119,120,121,122)

(P130539)

This QA Inspector randomly observed the following work in progress:

OBG # CROSS BEAM CB01

This crossbeam appears to be complete and had been loaded on the ship.

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#### **OBG # CROSS BEAM CB02**

This crossbeam appears to be complete and had been loaded on the ship.

# **OBG # CROSS BEAM CB03**

This crossbeam appears to be complete and had been loaded on the ship.

# **OBG # CROSS BEAM CB04**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB05**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

# **OBG # CROSS BEAM CB06**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

# **OBG # CROSS BEAM CB07**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present

#### **OBG # CROSS BEAM CB08**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

# **OBG # CROSS BEAM CB09**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB10**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

# **OBG # CROSS BEAM CB11**

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This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSS BEAM 12

This QA observed ZPMC qualified welding personnel identified as 054459 perform Flux Cored Arc Welding Process (FCAW) welding on joint identified as CB201G-034-161, CB201G-035-143, and CB201G-036-163. ZPMC Quality Control Personnel (QC) identified as Sun yan fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-3G (3F)-Repair.

#### OBG # CROSS BEAM CB13

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB14**

This QA observed that ZPMC is continuing to fit the bottom panel to side panel. No other significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB15**

This QA observed that ZPMC is continuing to fit the bottom panel to side panel. No other significant work was observed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB16**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

As mention above

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Sukanthan, Dhanasingh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer